

Abstract

An optical attenuator includes an attenuating section arranged between a receiving waveguide coaxial with a receiving optical fiber and a transmitting waveguide coaxial with a transmitting optical fiber to attenuate the intensity of light emitted from the receiving waveguide. In the optical attenuator, an actuator drives a movable section across the propagation of light. An inner housing has a cover mounted with the receiving and transmitting waveguides in an underside and a body arranged and bonded under the cover. The receiving and transmitting waveguides can be arranged in a cavity of the body without interference. An outer housing contains the inner housing to protect the same. A calibrating section generates attractive force from above the cover to pull the movable section against the latitudinal deformation thereof so that optical axes of the attenuating section and the receiving and transmitting sections are coaxially aligned, compensating the vertical deformation of the movable section, in order to minimize the initial insertion loss of light as well as improve optical properties of a final product.